

Amendments to the Specification

The paragraph starting at page 2, line 12 and ending at page 3, line 2 has been amended as follows.

Printing apparatus employing the dot matrix printing method are the main trend because they are capable of printing at a high speed or high quality at a low cost. However, there is a significant recent trend toward printing dots with smaller diameters in order to obtain images with higher quality and higher definition, and this has resulted in more strict regulation of alignment between the printing positions of dots in respective tones (hereinafter also referred to as registration). The term “dot position aligning” implies a process of making corrections to align the printing positions of dots in respective tones when printing agents in a plurality of tones (the term “tones” implying colors and densities) are used. The term “dot position aligning” also implies even a process involved in printing in a single tone where corrections are made to align the printing positions of dots when printing is performed in both of a forward scanning and ~~an~~ a reverse scanning, for example, in a serial printing method.

The paragraph starting at page 9, line 1 and ending at line 19 has been amended as follows.

A printing medium 105 inserted into a paper feed position of a printing apparatus 100 is transported by a transport roller 106 in the direction of the arrow P to a printable region of a printing head 104. A platen 107 is provided in the printable region

such that it is located under the printing medium 105. A carriage 101 is guided by two guide shafts 102 and 103 and is movable in a direction that is in parallel with the axial direction of the shafts. The carriage is driven by a main scanning motor (not shown), which is a stepping motor, for example, to scan a scanning area including a printing area back and forth in the directions indicated by the arrows Q1 and Q2 that are a main scanning direction. When one main scan is completed, the printing medium is transported a predetermined distance in a sub-scanning direction that is the direction indicated by the arrow P by driving a sub-scanning motor, which is not shown, in preparation for the next main scan. An operation of printing one page of the printing medium is performed by repeating the main scan and sub-scan.

The paragraph starting at page 10, line 5 and ending at line 20 has been amended as follows.

Fig. 2 is a schematic view for explaining a configuration of the ink ejecting section of the printing head 104. The printing head used in the present embodiment can eject ink in four colors, i.e., yellow (Y), magenta (M), cyan (C), and black (Bk). Each of 128 ejection openings 104C, 104M, and ~~104Y~~ 104Y for yellow, magenta, and cyan, respectively, are arranged in parallel in the form of rows in a sub-scanning direction S for example, and 320 ejection openings 104Bk for black are arranged in parallel with them. The ejection openings for each color are provided at a pitch of 1/600 dpi (dot per inch) or about 42 μ m in the sub-scanning direction. A driving frequency of the printing head is 15 kHz, and a printing operation can be performed at a density of 600 dpi in the main

scanning direction. Therefore, the speed of a main scan of the carriage 101 during the printing operation is about 635 mm/s.

The paragraph starting at page 19, line 19 and ending at line 25 has been amended as follows.

Even when an “input apparatus A” is recognized, the process may proceed to STEP 05 if the content of the flag F provided in the EEPROM is “0” (default value) as a result of a reference made to the same. It is thus possible to prevent any reduction in image quality in cases such as when the setting process for registration has not been performed in practice even ~~through~~ though a PC is connected.

The paragraph starting at page 31, line 4 and ending at line 16 has been amended as follows.

A printing apparatus to which the present embodiment is applied is configured to such that a user can set and change a mode in which high speed printing is performed on a compulsory basis using an appropriate input unit (a switch portion of the printing apparatus or a GUI of a printer driver) prior to printing. For example, judgment on whether the mode has been set or not can be made by providing a predetermined flag (F2) in the storage region of the RAM section 403 in the control system of Fig. 3 and by setting the flag (F2 = “1”) in response to an operation of inputting the setting of the

compulsory high speed printing mode and by resetting the flag (F2 = “0”) in response to an operation of changing the setting.

The paragraph starting at page 31, line 24 and ending at page 32, line 10 has been amended as follows.

If the flag F2 is “0”, i.e., the compulsory high speed printing mode is not selected, the process proceeds to STEP 33. At STEP 33, it is judged whether the setting process for registration has been performed or not from the content of a flag F just as is done in the above embodiments. If the flag F is “1”, since the setting process for registration has already been performed, the process proceeds to STEP 32 at which the mode for high speed printing is set. If the flag F is “0”, since the setting process for registration has not been performed yet, the process proceeds to STEP 34 to set a mode for low speed printing such as unidirectional printing or low speed scanning which is aimed at prevention of a reduction in image quality. Then, STEP ~~27~~ 35 performs a process of printing the job in the set mode.

The paragraph starting at page 34, line 19 and ending at page 35, line 8 has been amended as follows.

Some of the above-described embodiments show examples wherein a printing mode is selected in which the printing speed is substantially ~~decreases~~ decreased for printing data that are input when an apparatus other than a PC is connected as a host

apparatus. In the case of an input from a PC, the printing apparatus accept each of the colors black, yellow, magenta, and cyan as binary data indicating whether it is printed or not. An input from an apparatus other than a PC may be a multi-valued RGB signal. In order to accommodate the same, the printing apparatus performs a process of converting the multi-valued signal into binary data for each of the colors black, yellow, magenta, and cyan through an arithmetic process in the CPU, and the arithmetic process requires a long time. The reason is that a printing apparatus employs a CPU that is lower in processing speed than those of PCs which recently employ CPUs capable of calculations at a high speed.

The paragraph starting at page 37, line 13 and ending at line 20 has been amended as follows.

Furthermore, a system, in which the supplied program codes are ~~one~~ stored in a function ~~expanding~~ expansion board of the computer or a memory provided in a function ~~expanding~~ expansion unit connected to the computer, and then a part of or all of processes are executed by the CPU or the like provided in the function ~~expanding~~ expansion board or the function ~~expanding~~ expansion unit on the basis of the command from the program code, is also encompassed within the scope of the present invention.